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10/009,588	09/10/2002	Claude Texier	11016-0006	3105

7590

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Clark & Brody
1750 K Street N W Suite 600
Washington, DC 20006

EXAMINER

JOLLEY, KIRSTEN

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,588

Applicant(s)

TEXIER, CLAUDE

Examiner

Kirsten C Jolley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-8, 12-13 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-11, 14-16 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The 35 USC 112, 1st paragraph rejections set forth in the prior Office action have been withdrawn in response to Applicant's amendments to claims 1-6.
2. New rejections are made over the newly-found art of Foley et al. (US 4,518,627), and therefore this action is made non-final.

Specification

3. The disclosure is objected to because of the following informalities: The brief description of drawings section should be labeled as such.

Appropriate correction is required.

Claim Objections

4. Claims 14 and 20-21 are objected to because of the following informalities:

In claim 14, line 2, the Examiner suggests changing "the medium" to --a medium-- since there is not antecedent basis for "the medium" in the claim.

In claim 14, it is noted that the binder is referred to as "a principal binder" in line 3, and as "the main binder" in line 5. The Examiner suggests making the naming of the binder consistent.

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In claim 20, the Examiner suggests changing “the binder” in line 2 to either --principal binder-- or --main binder-- (to be congruent with claim 14) since claim 14 requires two different applications of binder.

In claim 21, line 3, the Examiner suggests changing “the metal surface” to --a metal surface-- since there is not antecedent basis for ‘the metal surface.’

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-3, 5-6, 9-11, and 14-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, lines 2-3, the limitation “ferromagnetic particles such as iron oxide particles” is vague and indefinite because it is not clear whether iron oxide particles are required by the claim or not. For purposes of examination, claim 2 has been broadly interpreted as requiring only ferromagnetic particles.

In claim 3, line 3, the limitation “conductive particles ... that are not ferromagnetic particles, such as particles of copper” is vague and indefinite because it is not clear whether copper particles are required by the claim or not. For purposes of examination, claim 3 has been broadly interpreted as requiring only conductive particles that are not ferromagnetic.

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Claim 5 is vague and indefinite because it contains improper Markush language. The Examiner suggests adding --the group consisting of-- after “from” and before “a” in line 3.

In claim 6, the phrase “is preferably not electrically conductive” is vague and indefinite because it is not clear whether the claims requires that the adhesive resin is electrically conductive or not. The metes and bounds of the claim are not known.

Claim 9 recites the limitation "the pre-glued medium" in line 4. There is insufficient antecedent basis for this limitation in the claim because claim 7 does not require that the binder is a glue.

Claim 14 is vague and indefinite because it is not clear which means (means for feeding or means for applying) the phrase “said means” refers to in line 3.

Claim 16 is vague and indefinite because in lines 2-3 it states “at least one measuring-out unit replacing the system of vibrating screens,” yet the claim then further limits the screens. Therefore it is not clear whether claim 16 requires the use of screens or not.

Claim 16 is also vague and indefinite because it is not known what a “measuring-out unit” is.

Claim 18 recites the limitation "the front medium" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the front medium" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Foley et al. (US 4,518,627).

With respect to claim 1, Foley et al. discloses a coated backing medium comprising a magnetic coating material spread substantially regularly over a surface of the backing medium, said coating material comprising a binder having embedded therein conductive particles, the conductive particles being directed in the binder by being subjected to magnetization so as to generate an anisotropic medium as part of said magnetic coating material. Further, it is noted that the magnetic field utilized may be an electromagnetic field (col. 14, lines 24-27).

As to claim 2, the conductive particles in Foley et al.'s coating include ferromagnetic particles (col. 7, lines 42-48). As to claim 3, Foley et al.'s coating may also include conductive, non-ferromagnetic particles such as carbon black or graphite (col. 7, lines 56-57).

As to claim 4, Foley et al. teaches that the conductive particles are "needlelike" which meet the limitation of rod shaped (col. 6, line 31). As to claims 5-6, Foley et al.'s binder is a paint. Foley et al. also teaches that an adhesive may be applied just prior to the particles (col. 7, lines 67-68). The binder of Foley et al. is not electrically conductive.

Claim Rejections - 35 USC § 103

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 14-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foley et al. in view of Fitch (US 3,503,882).

Foley et al. discloses a coating apparatus comprising: means for feeding a backing medium (see col. 6, line 58 to col. 7 and Figure 3); means for applying a main binder; heater means; means for spreading (col. 7, line 22); electromagnetic means for producing an anisotropic magnetic field for magnetizing the particles (col. 14, lines 24-27); means for applying additional binder (col. 8, lines 1-2); and dryer means.

Foley et al. does not specifically teach that the backing medium is fed onto a conveyor. However, the Examiner notes that use of a conveyor to hold a web medium is well known. It would have been obvious to one skilled in the art to have used a conveyor to support Foley et al.'s backing medium in order to support the web medium and ensure that it does not break. Foley et al. also does not specifically teach that the main binder is applied via presser rollers and at least one nozzle. However, Foley et al. broadly states "the coating may be applied with any suitable coating apparatus." It is well known in the web coating art to apply binder coatings via a nozzle and presser rollers. It would have been obvious to one having ordinary skill in the art to have used a nozzle and presser rollers to apply the main binder coating of Foley et al. with the expectation of successful results since such an apparatus is well known in the art and because Foley et al. is not limited as to the type of coating apparatus that may be used.

Foley et al. teaches dispensing the binder having the magnetic particles already therein. Foley et al. lacks a teaching of using a tank of particles and duster to apply the particles onto the coated medium after the coating has been applied. Fitch is cited for its teaching that applying magnetic particles to a wet paint by dusting is a known alternative to providing a wet paint having magnetic particles dispersed therein (col. 1, lines 37-42). Inherent in a method for dusting wet paint with magnetic particles is an apparatus comprising a tank of particles and a duster for distributing the magnetic particles to the coating. It would have been obvious for one having ordinary skill in the art to have substituted one means of distributing magnetic particles in a coating for another, i.e., a tank and duster to apply magnetic particles to a wet paint by dusting instead of applying a wet paint having magnetic particles already dispersed therein, with the expectation of similar and equivalent results, in the absence of a showing of criticality.

As to claims 15-16, it would have been obvious to have programmed the duster to deliver the desired quantity of powder in order to increase the control and repeatability of Foley et al.'s process. Further, it would have been obvious to have used vibrating screens or a unit for measuring the amount of powder to distribute the powder over the coating material in order to provide an evenly coated product since such means are well known in the art.

As to claim 18, Foley et al. illustrates the use of winding-off roll and winding roll in Figure 3.

As to claim 19, Foley et al. only discloses use of a continuous process, however it would have been obvious to have performed the process of Foley et al. discontinuously using sheets instead of a web with the expected loss of efficiency.

As to claim 21, Foley et al. teaches means for cutting up the resulting coated medium (die stampers) in col. 6, lines 4-5. It is noted that the limitation of forming elements that are to be held in place on metal surfaces by magnetic forces acting between the element and metal surface is an intended use limitation. It is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPQ 459 (CCPA 1963).

Allowable Subject Matter

11. Claims 7-8 and 12-13 are allowed. The prior art does not teach or fairly suggest a method of applying a coating on a backing medium comprising: applying a main binder on the backing medium while the medium is being guided by a conveyor; controlled dispensing and uniform spreading of conductive particles in the binder; directing the particles by magnetization *then followed by a step of demagnetization*; covering the particles in a deposit of additional binder; and drying the assembly.

12. Claims 9-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 9-11 are allowable for the same reasons discussed above with respect to claim 7.

13. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or fairly suggest a coating apparatus

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comprising: electromagnetic means for producing an anisotropic magnetic field for magnetizing particles in a binder, followed by a demagnetizer placed immediately from the electromagnetic means, and a final magnetizer placed downstream from the dryer means, in combination with the other apparatus elements of claim 14, wherein the fill comprises at least some ferromagnetic particles.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jeffers (US 5,700,594), Tadokoro (US 4,338,643), and Bate et al. (US 4,208,447) are cited for their teachings of forming anisotropic magnetic coated mediums.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink that reads "Kirsten C Jolley". The signature is written in a cursive, flowing style.

Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj